

Date: Monday, 23/02/2009 10:27:31 AM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: FLOAT SKID ASSEMBLY
Job Number	: 45973A		
Estimate Number	: 10756		
P.O. Number	:	Part Number	: D412742043
This Issue	: 23/02/2009	S.O. No.	:
Prsht Rev.	: NC	Drawing Number	: D3391 <i>REV. H</i>
First Issue	: 23/02/2009	Project Number	: N/A
Previous Run	: 44112A	Drawing Revision	: <i>8/11</i>
Written By	:	Material	:
Checked & Approved By	: <i>JUD 09.02.23</i>	Due Date	: 15/03/2009
Comment	: Est Rev A 05.10.13 New Issue KJ/JLM	Qty:	1 Um: Each
	Est Rev B 06.02.13 ECN 773 dwg @ rev.D EC		
	Est Rev:C 07-05-28 As per Rev F JLM		
	Est Rev:D 07-12-04 ECN 1072 DD verified		
	by:JLM		
	Est Rev:E 08-09-08 ecn 08-510 DD verified by:EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

If D412-742-043 is a W/O on it's own,
 Photocopy bluefile and create labels per PPP D412-742-043 CHG004

2.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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**Comment:** HAND FINISHING RESOURCE #1

✓ 1-Spray inside tube of D3391-021/-023/-025 with LPS-3 as per Dwg D3391
 A/R LPS-3 *M109956*

2-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins.

✓ A/R Sikaflex-241/-291 *M109883*
 Expiry date: *09/11*

3-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Coat bolts with LPS "procyon".

Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex.

✓ A/R LPS Procyon *M109883*
 A/R Sikaflex-241/-291 *09/11 M109833*
 Expiry date: *09/11*

✓ Remove "T" pins once sikaflex is dry.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng/ Prod Mgr	Approval QC Inspector	
09/02/24	3.1	27 Δ3391-021 Qty 1 Batch: <u>B44091D</u>	JH	09-03-10 x1	1	[Signature]	[Signature]	
	5.1	Δ3591-1 Qty 2 Batch: <u>B43172</u>		09/02/24 09-02-70 x1	2	[Signature]	[Signature]	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 23/02/2009 10:27:31 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKID ASSEMBLY

Job Number: 45973A

Part Number: D412742043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

3.0

D3391023

Mid Tube Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

pick:

Qty Part Number Description

Batch

1 D3391-023 Mid Tube Assembly

344075

JS

4.0

D3391025

Aft Tube Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

pick:

Qty Part Number Description

Batch

1 D3391-025 Aft Tube Assembly

341755

JS

5.0

D35641

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: 345433

JS

6.0

D35661

Gasket



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

GASKET

Batch: 346185

JS

7.0

D35643

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

340530

JS

8.0

D35645

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

345824

JS

09-03-10

JS

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 23/02/2009 10:27:31 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FLOAT SKID ASSEMBLY

Job Number: 45973A

Part Number: D412742043

Job Number:



Seq. #:

Machine Or Operation:

Description :

9.0

D35665

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: 1345718

JH

10.0

AN3C4A

BOLT



Comment: Qty.: 24.0000 Each(s)/Unit Total : 24.0000 Each(s)

BOLT

Batch: 1110985

JH

11.0

AN3C6A

BOLT



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

BOLT

Batch: 1110332

JH

12.0

AN3C7A

BOLT



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Batch: 11107376

JH

13.0

AN960C10L

washer



Comment: Qty.: 44.0000 Each(s)/Unit Total : 44.0000 Each(s)

washer

Batch: M 110267

JH

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

903.11 (1)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-742-043

Location:

PPP Rev:

PP

45973

9/3/12

R

SEP

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Drawing Name: FLOAT SKID ASSEMBLY

Job Number: 45973A

Part Number: D412742043

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

QC21

FINAL INSPECTION/W/O RELEASE



①

Comment: FINAL INSPECTION/W/O RELEASE

2009/03/13

Job Completion



2009.03.13

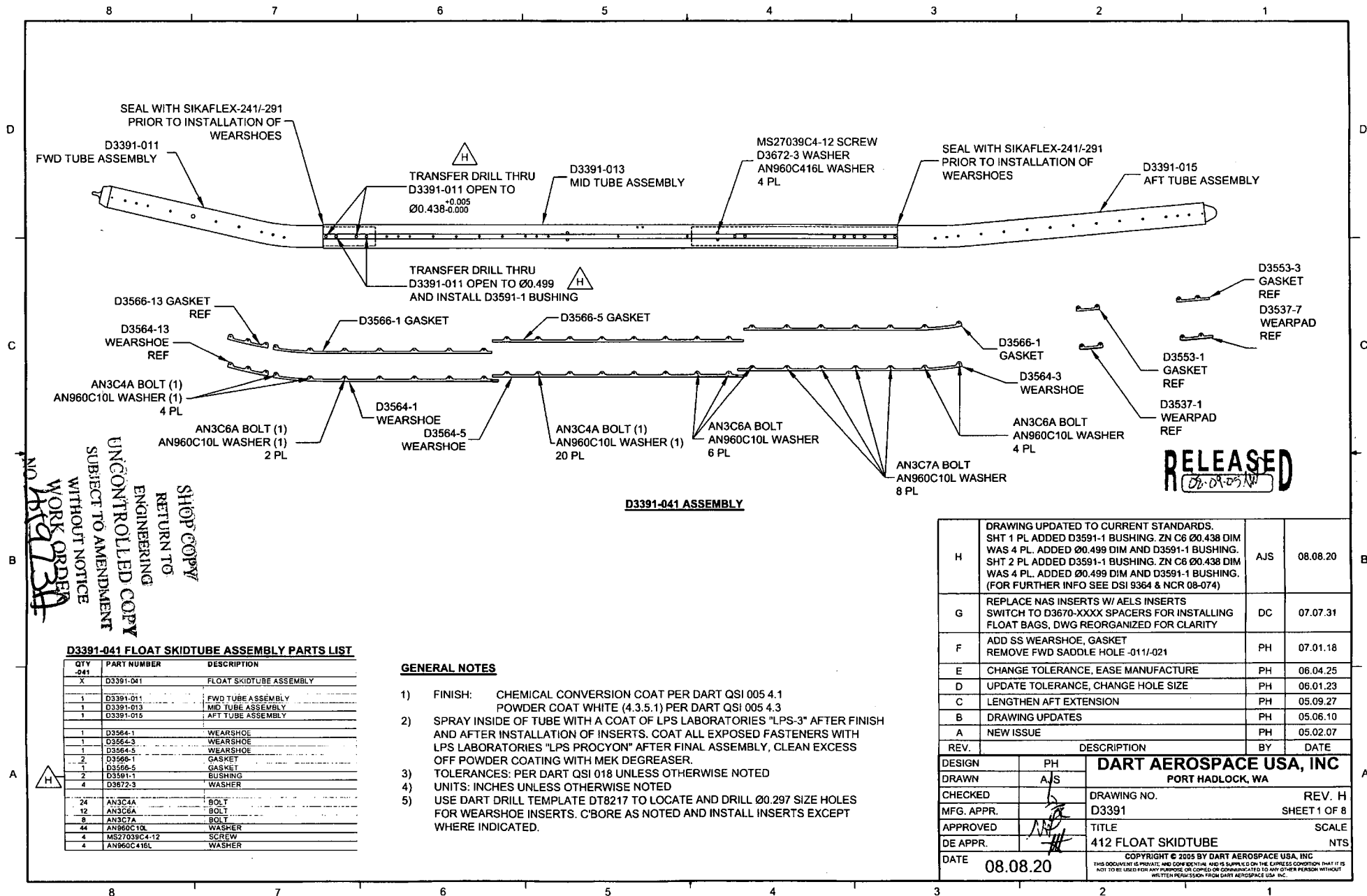
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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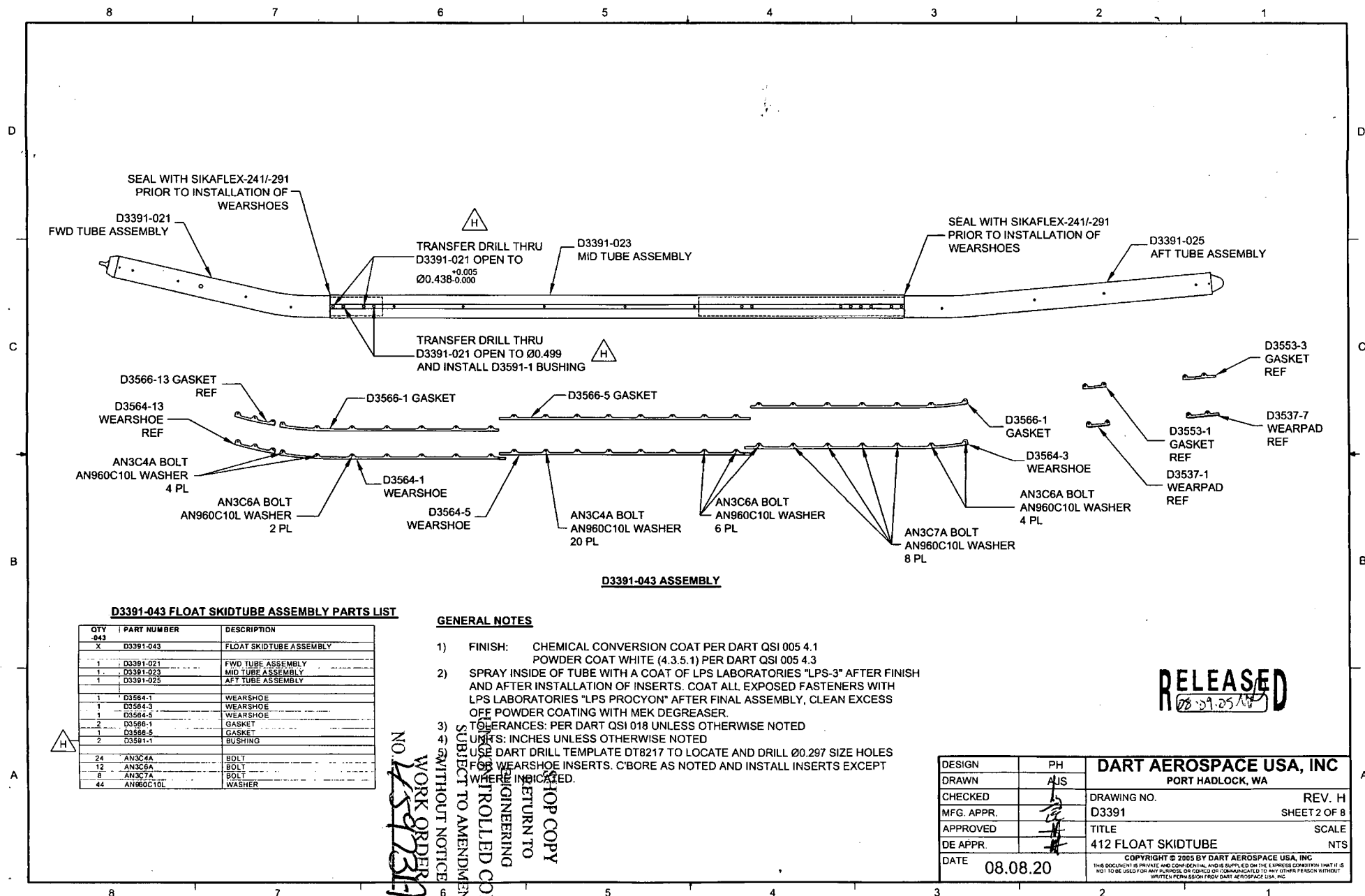
D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
-041		
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
1	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

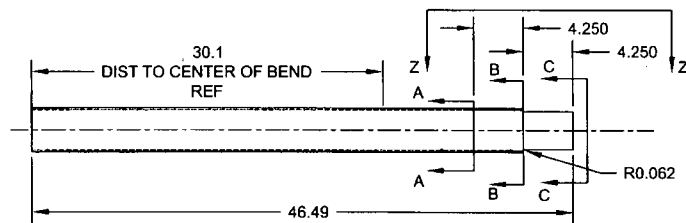
GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

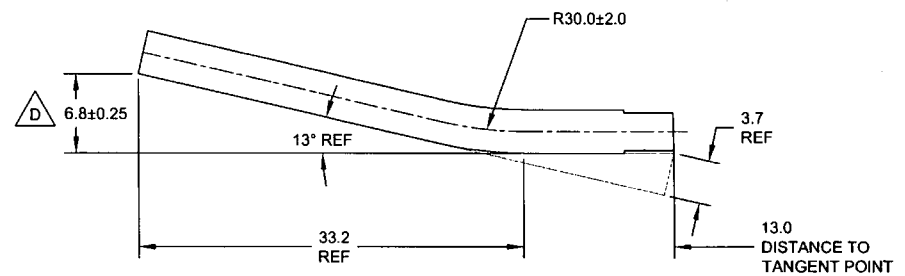
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO. D3391	REV. H
MFG. APPR.			SHEET 1 OF 8
APPROVED		TITLE 412 FLOAT SKIDTUBE	SCALE
DE APPR.			NTS
DATE	08.08.20	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



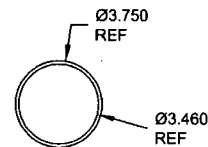
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08-09-25 AM



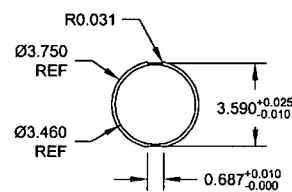
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



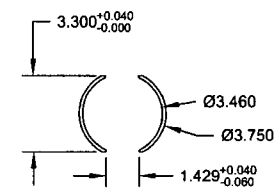
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



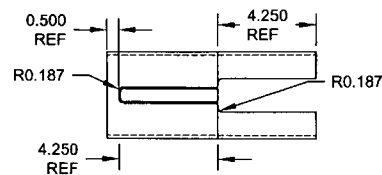
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
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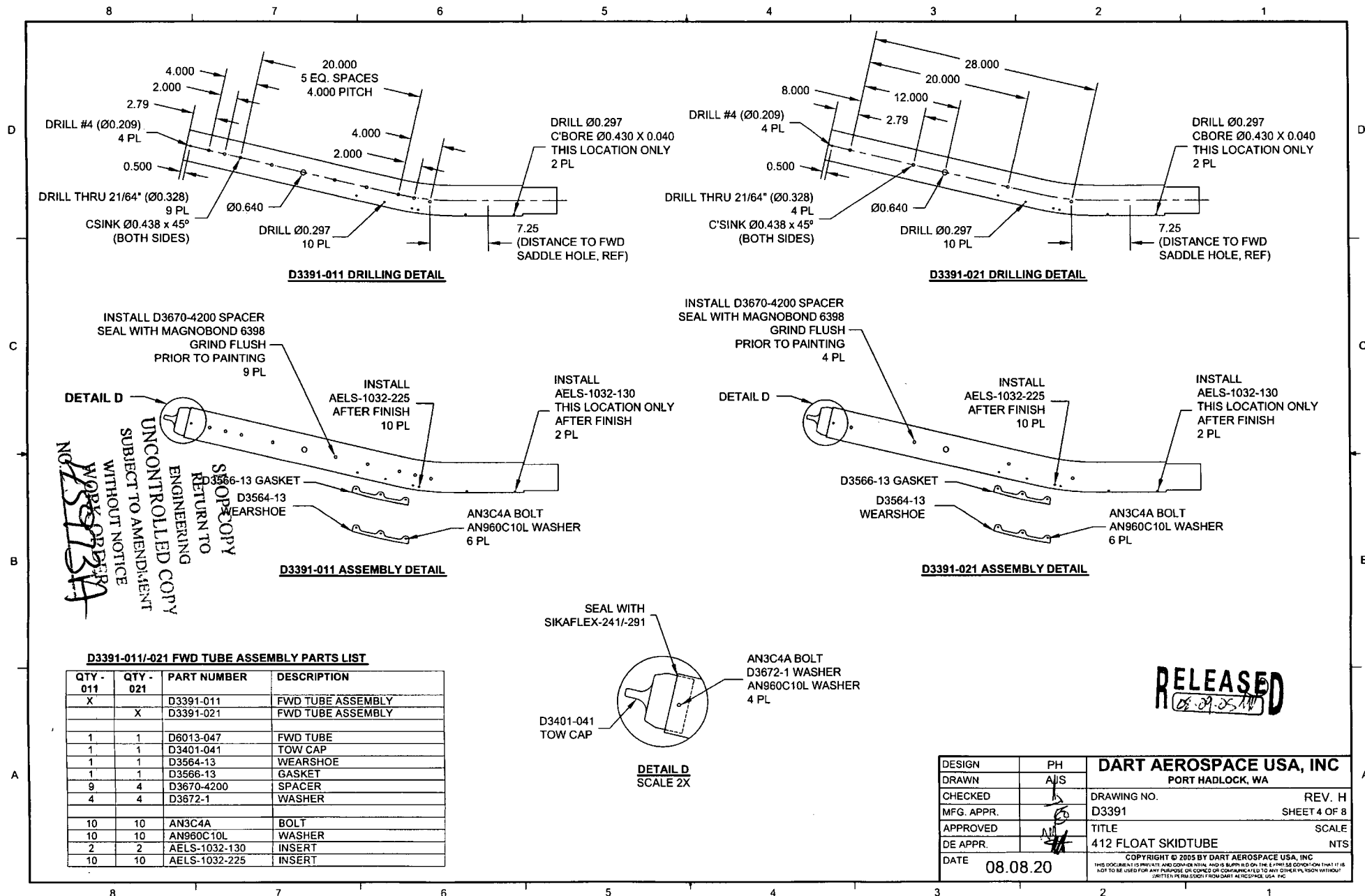


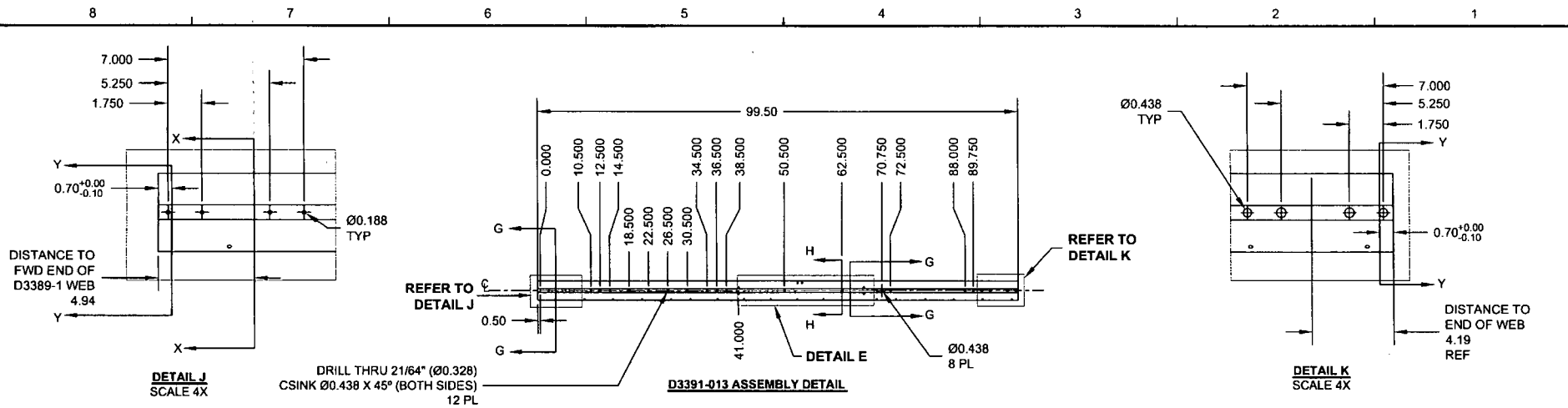
VIEW Z-Z
SCALE 2X

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8-3-05/11

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MFG. APPR.		D3391	SHEET 3 OF 8
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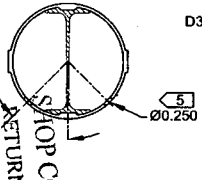
DETAIL J
SCALE 4X

DRILL THRU 21/64" (Ø0.328)
CSINK Ø0.438 X 45° (BOTH SIDES)
12 PL

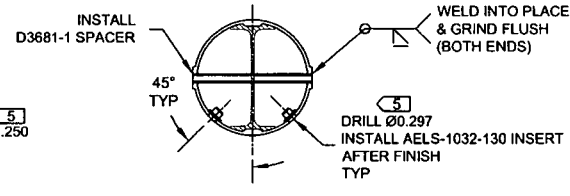
D3391-013 ASSEMBLY DETAIL

REFER TO
DETAIL K

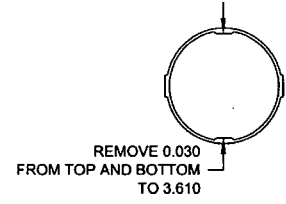
DETAIL K
SCALE 4X



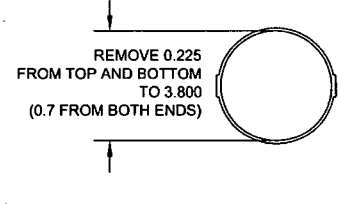
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X

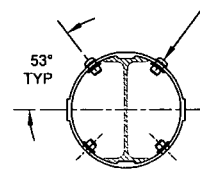


SECTION X-X
SCALE 5X

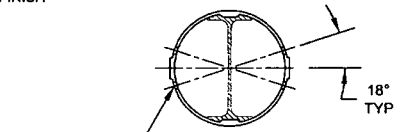


SECTION Y-Y
SCALE 5X

DRILL Ø0.297
INSTALL AELS-1032-130 INSERT
MS27039C1-09 SCREW
D3672-1 WASHER
AN960C10L WASHER
AFTER FINISH
4 PL

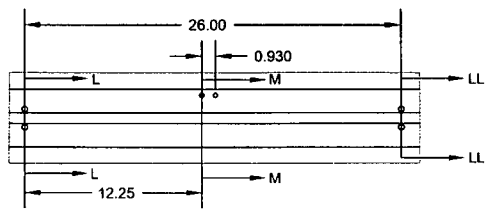


SECTION M-M
SCALE 5X

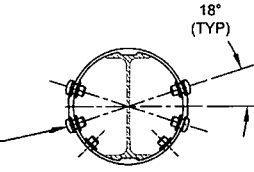


SECTION LL-LL
SCALE 5X

DRILL Ø0.250
4 PL



DETAIL E
SCALE NONE



SECTION L-L
SCALE 5X

DRILL Ø0.391
INSTALL ALS4-428-165 INSERT
MS27039C4-08 SCREW
D3672-3 WASHER
AN960C416L WASHER
AFTER FINISH
4 PL

D3391-013 MID TUBE ASSEMBLY PARTS LIST

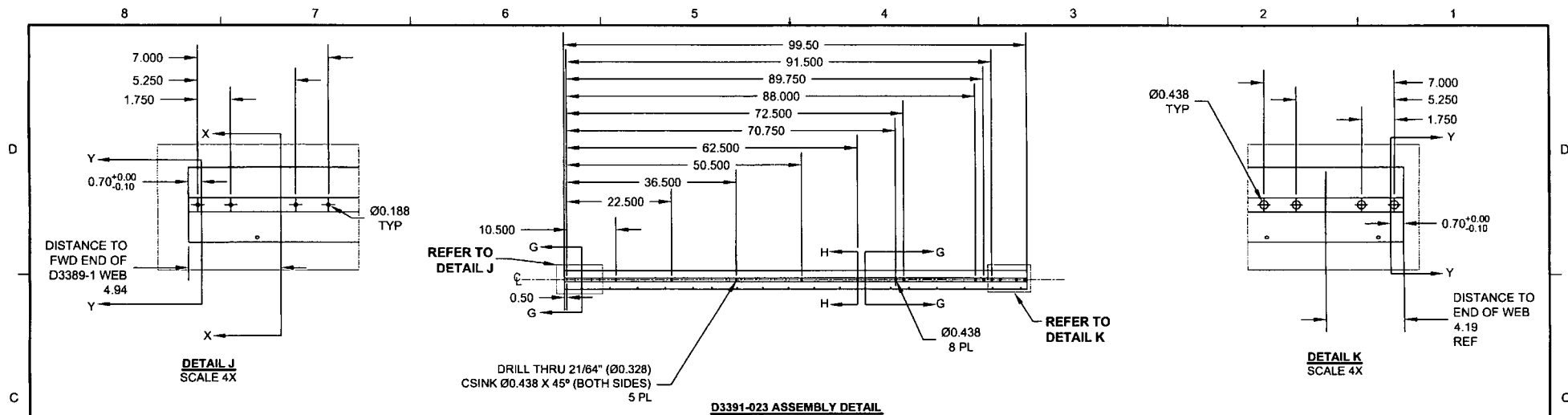
QTY	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW

D3391-013 MID TUBE ASSEMBLY

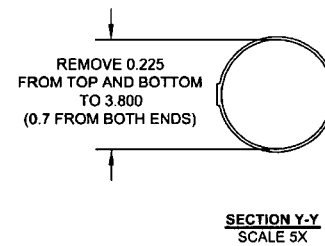
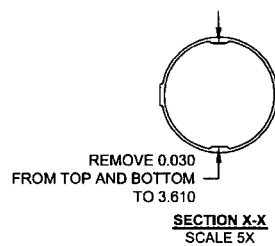
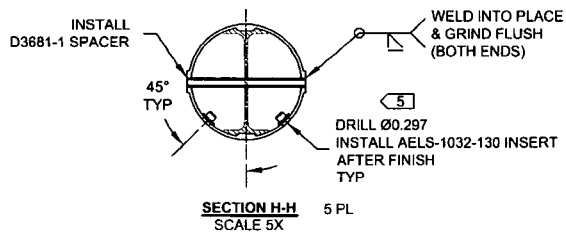
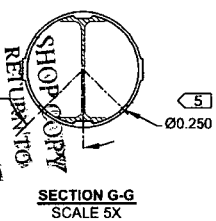
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 5 OF 8
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D3391-023 MID TUBE ASSEMBLY PARTS LIST

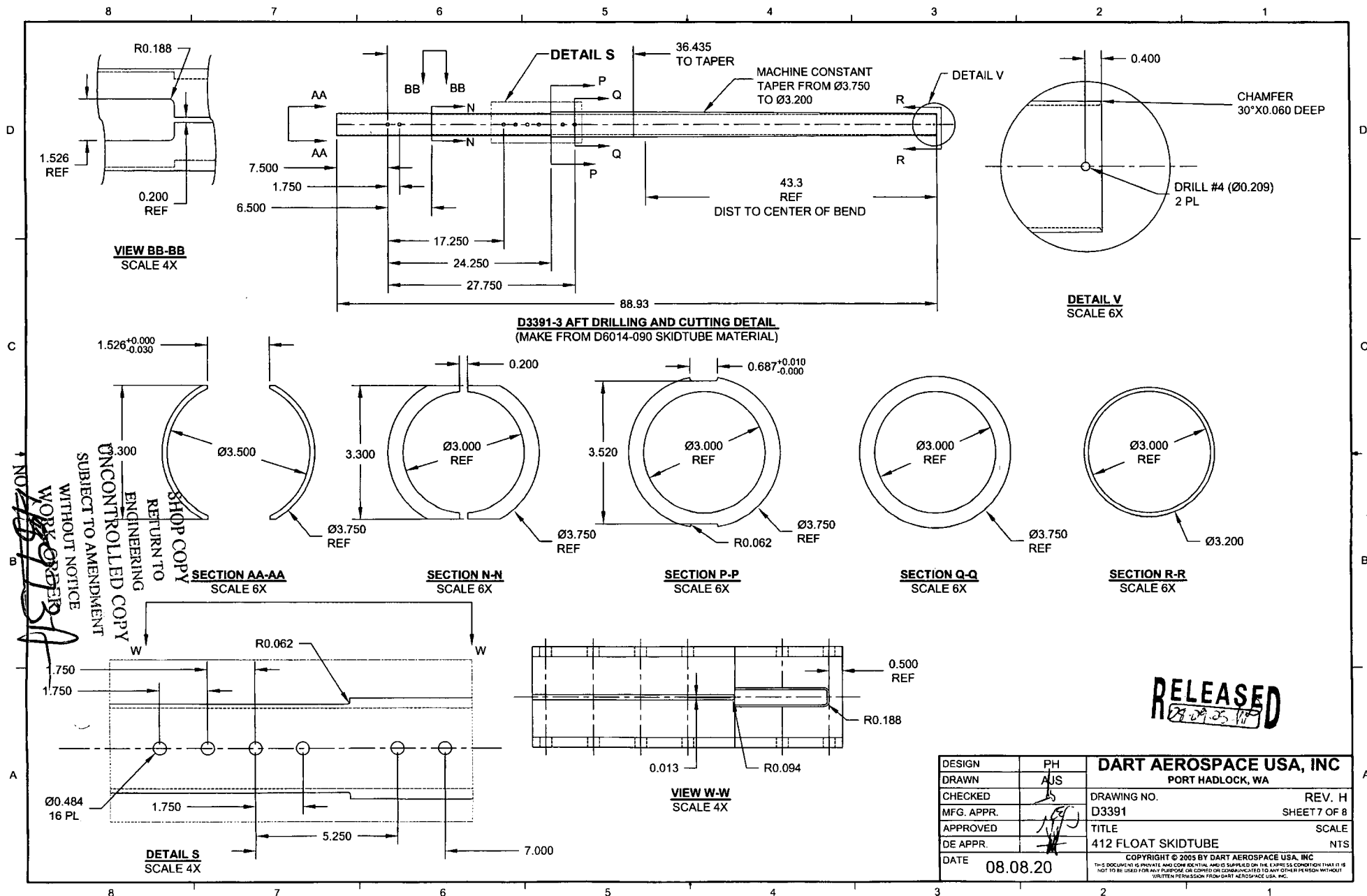
QTY.	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

RELEASED
08-05-17

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